

South Carolina Stroke Update

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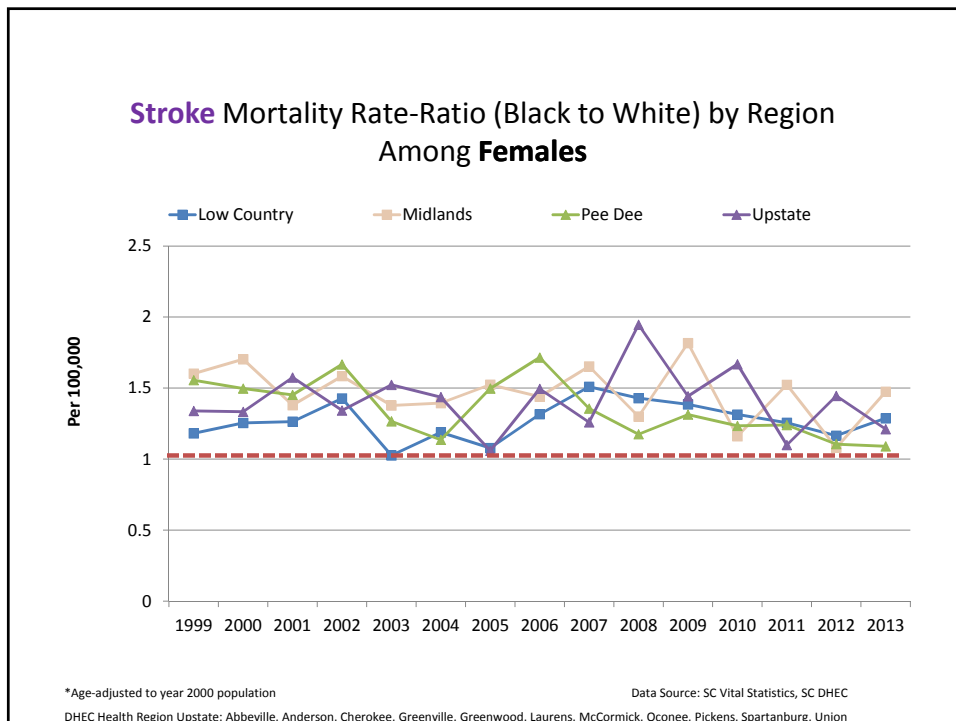
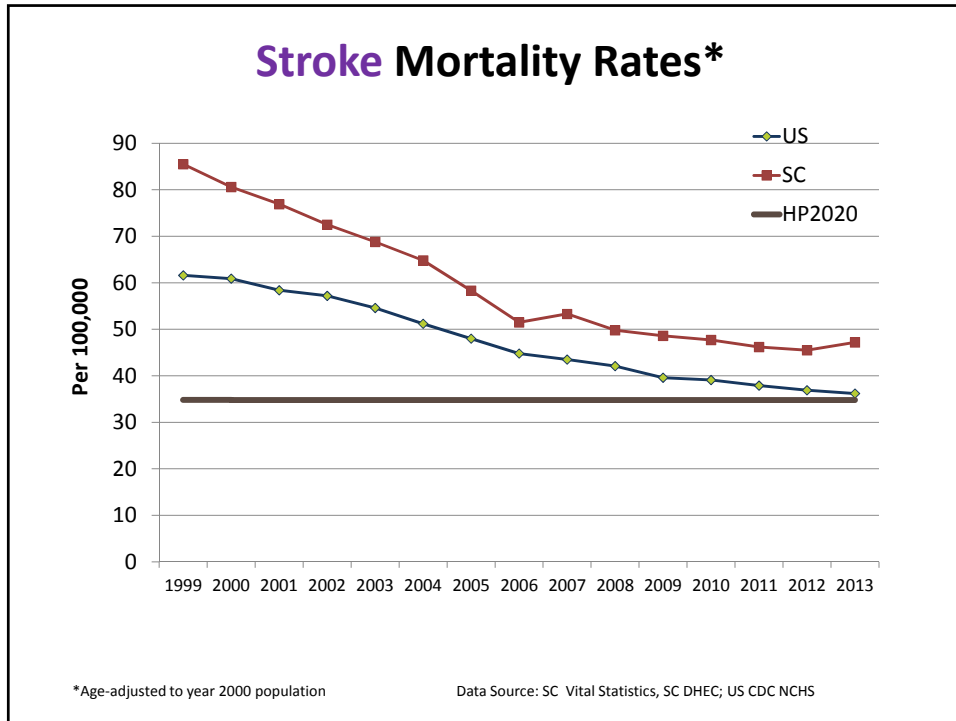
Stroke Death Rate Ranking by State, 2009-2013

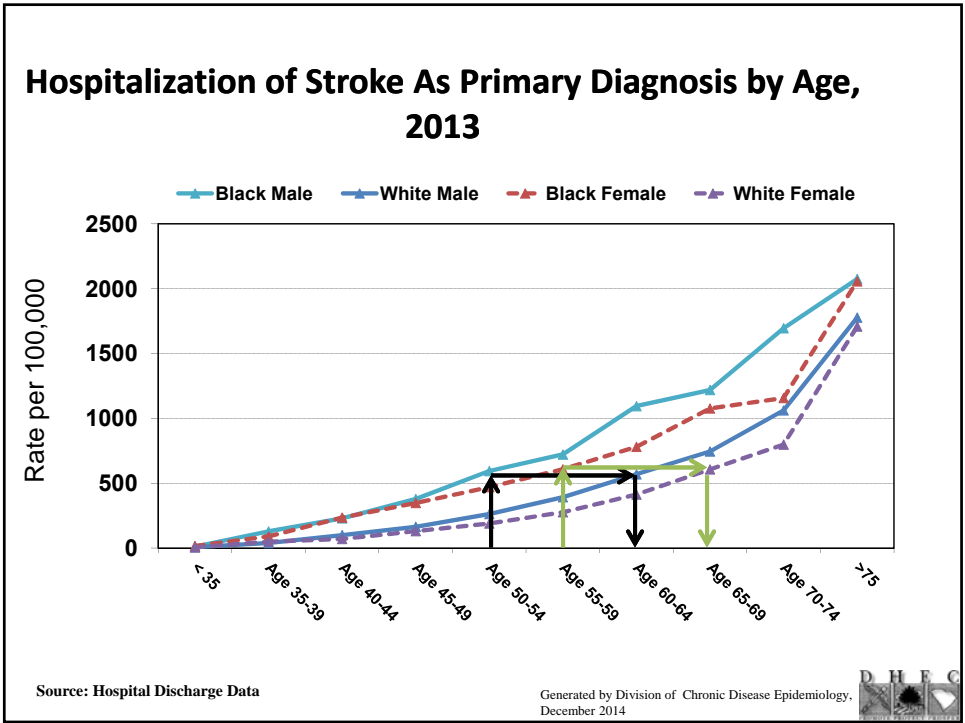
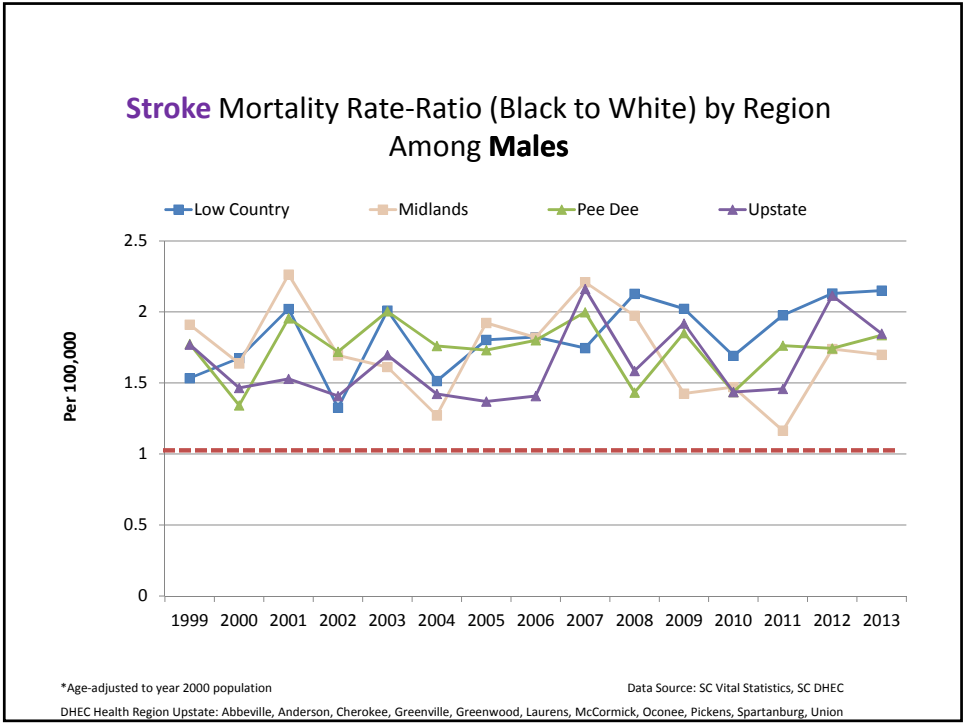
State	2009		2010		2011		2012		2013	
	Age Adjusted Death Rate	US Rank	Age Adjusted Death Rate	US Rank	Age Adjusted Death Rate	US Rank	Age Adjusted Death Rate	US Rank	Age Adjusted Death Rate	US Rank
Alabama	53.6	1	51.6	2	49.4	1	49.5	1	48.06	1
South Carolina	51.3	3	47.8	6	46.3	5	45.9	5	47.56	2
Mississippi	48.8	5	51.2	3	50.6	3	48.3	3	47.18	3
Arkansas	52.9	2	53.7	1	50.6	2	49.1	2	46.61	4
Oklahoma	50.1	4	50	4	45.8	6	45.7	6	44.54	5
Tennessee	48.7	6	48.7	5	47.5	4	44.9	7	44.35	6
Louisiana	47.4	7	44.9	9	45.7	7	43.9	9	44.02	7
North Carolina	47.2	8	44.7	10	43.2	12	42.8	10	42.43	8
Kentucky	46.3	11	44.1	13	44.8	8	44.3	8	41.69	9
Georgia	46.9	9	46.3	8	42.6	13	41.8	14	41.36	10
Alaska	40.8	23	40.8	21	39.4	22	42.5	12	40.72	11
Indiana	44.0	14	44.5	11	44.2	10	42.7	11	40.69	12
West Virginia	46.7	10	47.8	7	44.8	8	47.9	4	40.68	13
Missouri	44.9	13	44	14	43.4	11	42.2	13	40.63	14
Texas	45.2	12	44.4	12	41.9	15	41.8	14	40.17	15

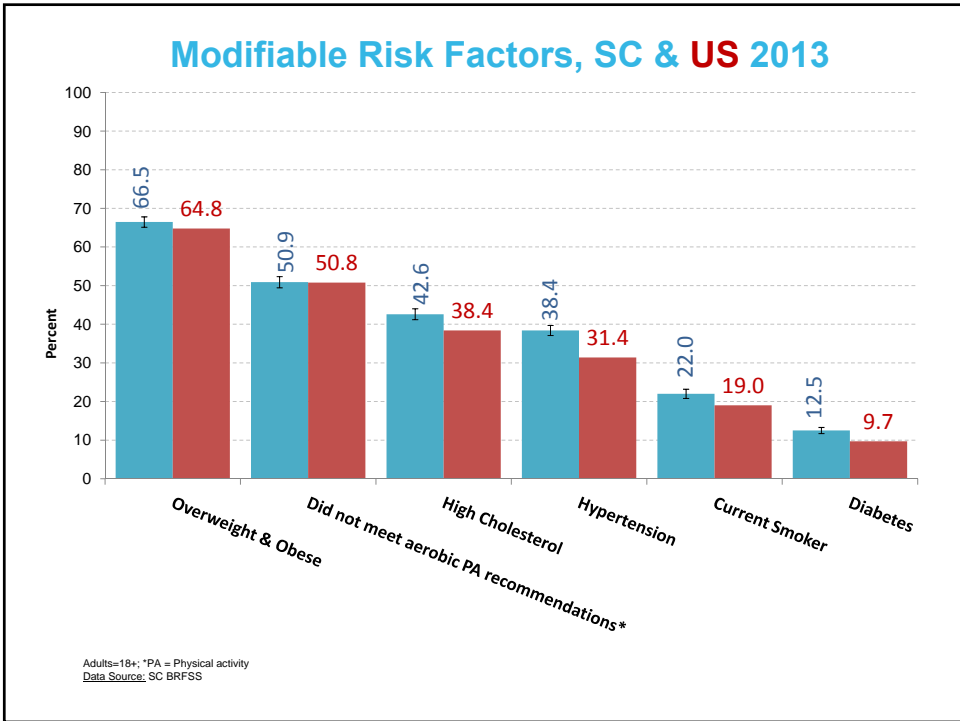
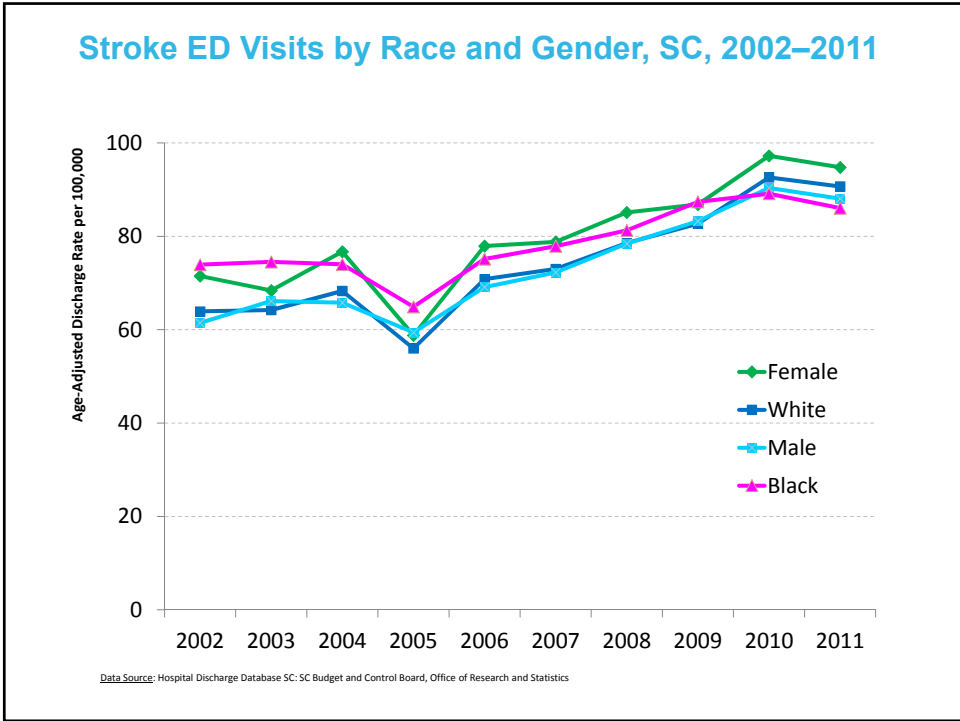
Stroke: ICD-10 codes I60-I69.

Rates per 100,000 population, age-adjusted to the 2000 U.S. standard population.

Data Source: Centers for Disease Control and Prevention, National Center for Health Statistics, Compressed Mortality File, 1999-2013. CDC WONDER Online Database. <http://wonder.cdc.gov/mortSQL.html>.





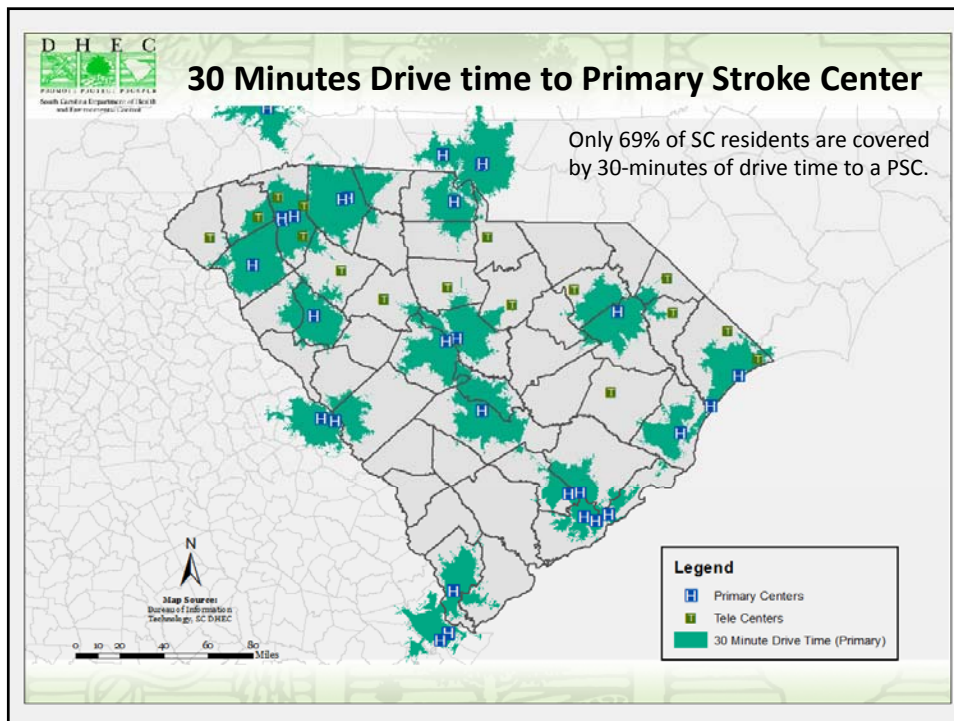
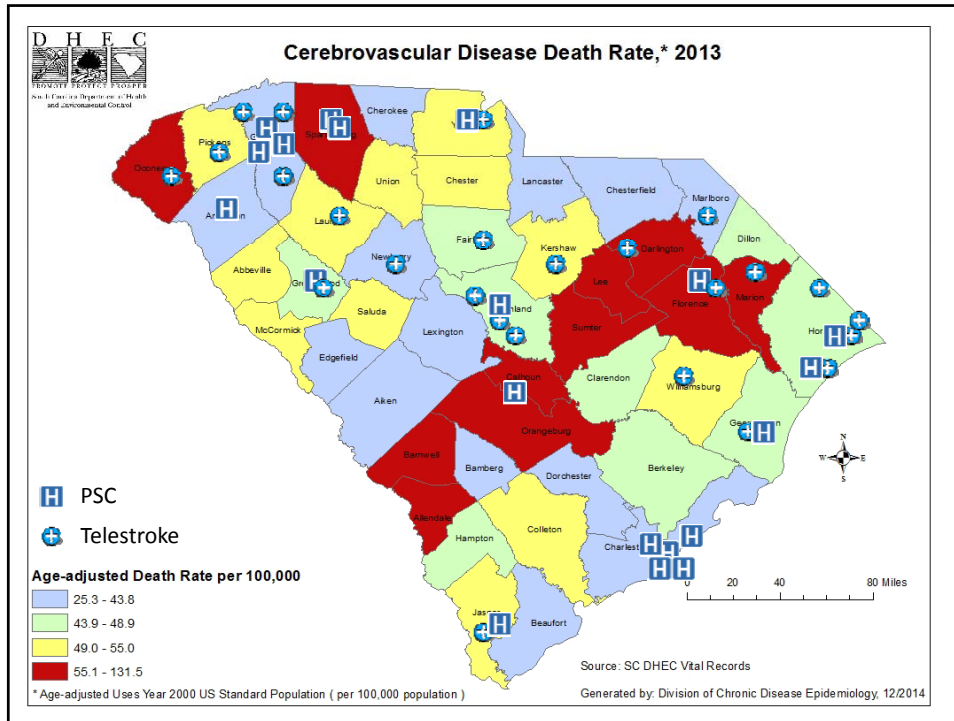


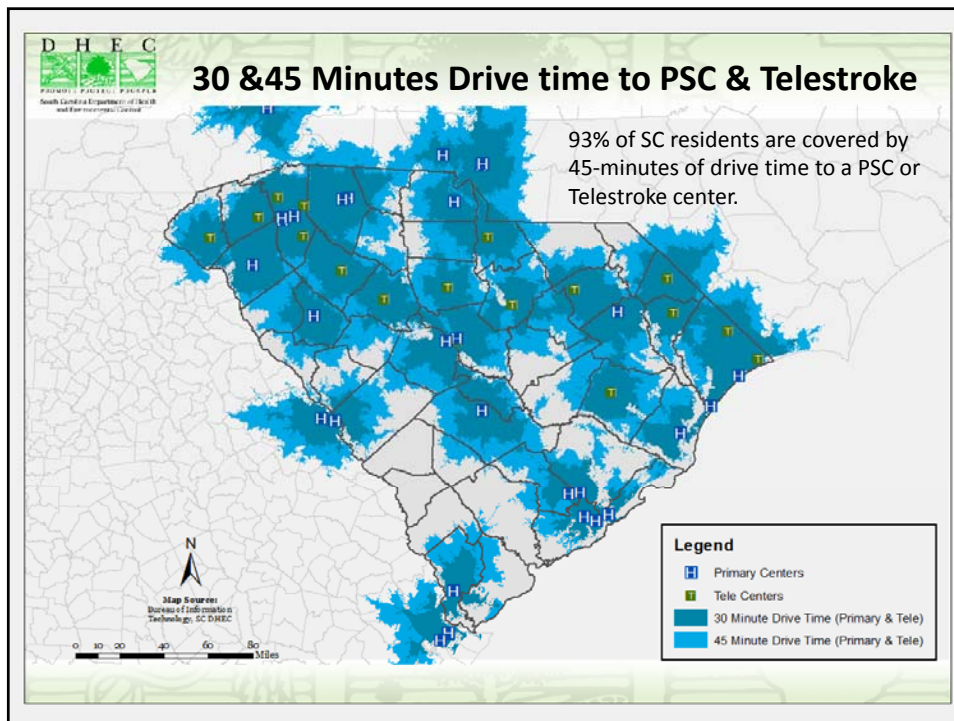
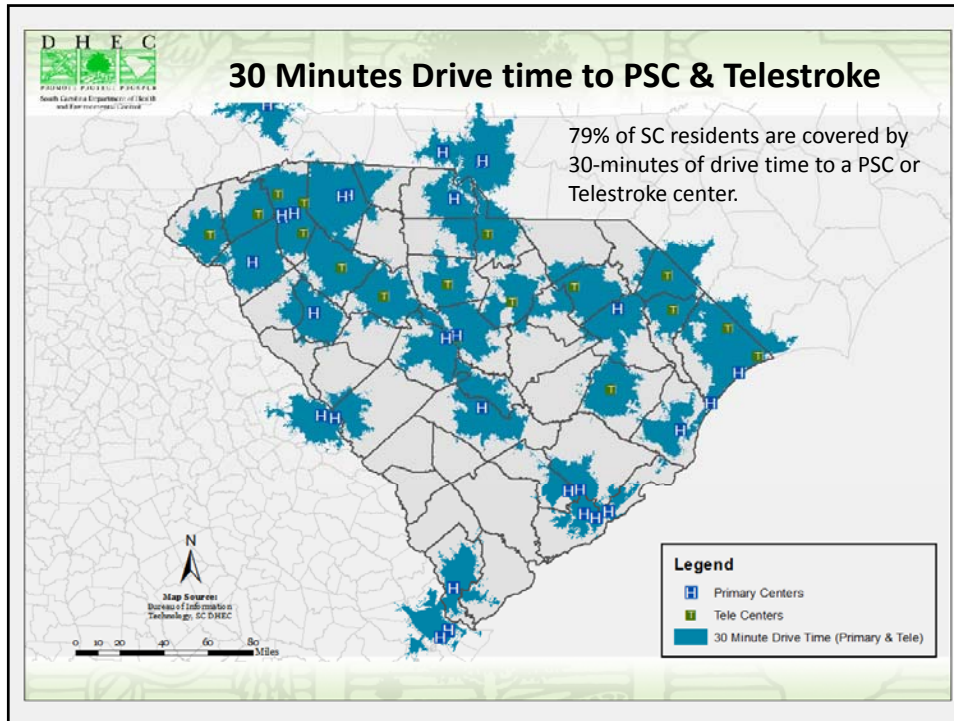
Hospitalization Charges for Selected Cardiovascular Disease Conditions and Risk Factors, SC, 2011

DIAGNOSTIC CATEGORY	South Carolina		
	TOTAL CHARGES	CASES	CHARGE PER CASE
HEART DISEASE	2.7 BILLION	52,746	\$51,900
STROKE	\$573 MILLION	14,511	\$39,550
HEART FAILURE	\$520 MILLION	14,768	\$32,212
DIABETES MELLITUS	\$278 MILLION	9,495	\$29,369
HYPERTENSION	\$163 MILLION	5,251	\$31,047

*ICD-9 codes: Heart Disease (390-392, 393-398, 402, 404, 410-414, 415-417 & 420-429), Stroke (430-438), Heart Failure (428), Diabetes Mellitus (250), Essential Hypertension (401).
 Data Source: South Carolina Office of Research and Statistics, Budget and Control Board

Drive Time





SC EMS-Hospital Data linked study

- Between 30%-35% of all stroke patients were transported via EMS,
- A typical stroke patient had a median arrival time of 42 minutes via EMS. If EMS staff did not diagnosed the stroke patient, the arrival time jumped to 56 minutes.
- Statewide iv-tPA rate among ischemic patients who were transported with EMS were 11% compared to the rate of 2.5% among non-EMS arrivals.
- Among those stroke patients who were identified with the Cincinnati Stroke Scale, the iv-tPA jumped to nearly 15%.

Summary:

- SC is ranked #2 in stroke mortality rate,
- The health disparities in stroke mortality have remained persistently high (Black to white Rate-Ratio > 1.0),
- A typical black with stroke has the same chance of hospitalization as a white patient with a 10 - years delay in age,
- Some of the SC adults' modifiable risk factors for stroke are more prevalent than the national median prevalence rate,
- Improvement in stroke system of care, particularly with the telestroke expansion, resulted in more SC residents being within 30 minutes of drive time to a stroke center,
- EMS transported stroke patients has declined over than three years,
- Hospitalization charges for CVD in SC exceeds \$3.2 Billion annually.